- PATENT -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Sayeedi	EXAMINER:	Mehra, Inder P
SERIAL NO.:	10/828,874	GROUP:	2617
FILED:	04/21/2004	CASE NO.:	CE12986R
ENTITLED:	ACCESS NETWORK AND METHOD FOR IMPROVED INTER-PDSN DORMANT MODE HANDOFF		

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September 14, 2007

Mail Stop APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

Commissioner:

Pursuant to 37 C.F.R. §41.37, the appellant hereby respectfully submits the following Brief in support of his appeal.

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(1) Real Party in Interest

The real party in interest is Motorola, Inc.

(2) Related Appeals and Interferences

There are no related appeals or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

Claims 1-12, 20-22 and 24 are pending and presently stand twice and finally rejected and constitute the subject matter of this appeal. Claims 13-19 and 20-25 are objected to.

(4) Status of Amendments

No post-final amendments have been submitted.

(5) Summary of Claimed Subject Matter

Claim 1, as amended, provides a method for an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the method including exchanging, by an Access Network (AN) with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS), establishing, by the AN with the MS, a traffic channel (TCH) to support the inter-PDSN handoff, determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, and in response to the determination that the signaling between the MS and the target PDSN has been completed, releasing, by the AN, the TCH. (FIG. 2, reference numbers 212, 214, 216 and 230; page 3 lines 18-26; page 7 lines 1-10)

Claim 7, as amended, provides a method for an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the method including exchanging, by an Access Network (AN) with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS), establishing, by the AN with the MS, a traffic channel (TCH) to support the inter-PDSN handoff, determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, and in response to the determination that the signaling between the MS and the target PDSN has been completed, releasing, by the AN, the TCH, wherein determining that the signaling between the MS and the target PDSN has been completed includes receiving, by the AN from the target PDSN, an indication that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed. (FIG. 2, reference numbers 212, 214, 216, 220 and 230; page 3 lines 18-26; page 7 lines 1-10; page 8 lines 7-21)

Claim 20, as amended, provides an Access Network (AN) for facilitating an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the AN including a packet control function (PCF) adapted to exchange, with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS) and also including a base station (BS), communicatively coupled to the PCF, that is adapted to establish, with the MS, a traffic channel (TCH) to support the inter-PDSN handoff, adapted to determine that signaling between

the MS and the target PDSN related to the inter-PDSN handoff has been completed, and adapted to release the TCH, in response to the determination that the signaling between the MS and the target PDSN has been completed. (FIG. 1, reference numbers 101, 113, 127, 125, and 141; page 3 line 27 – page 4 line 3)

Claim 21, as amended, provides an Access Network (AN) for facilitating an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the AN including a packet control function (PCF) adapted to exchange, with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS) and also including a base station (BS), communicatively coupled to the PCF, that is adapted to establish, with the MS, a traffic channel (TCH) to support the inter-PDSN handoff, adapted to determine that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed by receiving, from the target PDSN via the PCF, an indication that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, and adapted to release the TCH, in response to the determination that the signaling between the MS and the target PDSN has been completed. (FIG. 1, reference numbers 101, 113, 127, 125, and 141; page 3 line 27 – page 4 line 3; page 8 lines 7-21)

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 1, 4-6 and 20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Madour et al. (U.S. Publication Number 2001/0050907, hereinafter "Madour"), claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Harper et al. (U.S. Publication Number 2003/0021252, hereinafter "Harper"), claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Perras (U.S. Publication Number 2002/0141369), claims 7, 8, 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Madour (U.S. Publication Number 2003/0053431, hereinafter "Madour '431"), claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Jean (U.S. Publication Number 2004/0105400), claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Athalye (U.S. Publication Number 2004/0162031), claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Athalye, claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Madour '431 and Purnadi (U.S. Publication Number 2003/0219024), and claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Madour in view of Madour '431 and Purnadi and further in view of Julka et al (U.S. Publication Number 2005/0226154, hereinafter "Julka"). The appellant disputes these rejections.

(7) Argument

Rejections under 35 U.S.C. §112, first paragraph

None.

Rejections under 35 U.S.C. §112, second paragraph

None.

Rejections under 35 U.S.C. §102

Group 1 – Claims 1-6

Claim 1 provides (underlined language being relevant to the argument presented below):

> 1. (previously presented) A method for an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff comprising:
> exchanging, by an Access Network (AN) with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS);
> establishing, by the AN with the MS, a traffic channel (TCH) to support the inter-PDSN handoff;
> determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed;
> in response to the determination that the signaling between the MS and the target PDSN has been completed, releasing, by the AN, the TCH.

In the Final Office Action mailed January 12, 2007 (hereinafter "FOA"), the Examiner refers to Madour [0006, 0017, 0040, 0054, and 0064] as teaching the language of claim 1. Madour [0006, 0017, 0040, 0054, and 0064] reads (emphasis added):

> [0006]In the case of the authentication failure, an authentication center (AC) may be co-located with the MSC or with a Home Location Register (HLR). **When an MS attempts to use a packet-data service, the MSC and the Base Station Controller (BSC) serving the MS take steps to allocate a radio traffic channel.** In parallel, the BSC begins setting up a data path between the MS and a Packet Data Service Node (PDSN). In many cases, the path between the MS and the PDSN may be set up faster than the authentication is reported to the MSC. If an authentication failure is reported to the MSC after the data path is set up between the MS and the PDSN, the MSC deallocates the radio resources that were allocated to the MS, but presently does not do anything to release the data path.
> …

[0017]In yet another aspect, the present invention is an MSC in a wireless access network that includes a first signaling means for **receiving a message from a BSC indicating that an MS has powered down during a packet-data session**; means for **determining in the MSC that the packet-data session is dormant**; and a second signaling means for sending an instruction to the BSC to release network resources associated with the packet-data session.

...

[0040]If it is determined at step 37that the packet-data session is dormant, the method moves to step 41where the MSC updates the location of the MS in the MS's HLR, and then instructs the BSC to release the traffic and control channels that are allocated to the MS at 42. At step 43, the MSC sends a Location Update Accept message to the BSC and includes an instruction to release the resources associated with the PPP session. At 44, the BSC sends an A9-Update-A8message to the PCF 16with an indication of the dormant power-down by the MS. In response, the PCF tears down the associated resources, and the PDSN releases the PPP connection at step 45.

...

[0054]FIG. 6 is a signaling diagram illustrating the flow of messages between nodes in a wireless access network when there is an authentication failure following the establishment of a packet-data session in a third embodiment of the method of the present invention. In particular, **FIG. 6 illustrates the situation in which an inter-BSC/inter-PCF/intra-PDSN dormant handoff is performed** from a Source BSC 76 to a Target BSC 77, and from a Source PCF 78 to a Target PCF 79. The MS 13 is served by the same PDSN 18, and the authentication failure occurs in the MSC 11 following an Assignment Failure. It is assumed that the PCF has only one Packet Zone ID. It is also assumed that the MS has performed a MIP registration and established a PPP connection with the PDSN, but is now dormant, as shown at 81.

...

[0064]FIG. 9is a flow chart illustrating the steps of the method **when there is an authentication failure following an inter-PDSN dormant handoff**. At step 125, the MS performs an inter-PDSN dormant handoff. At 126, the packet-data session is reactivated **due to the sending of agent advertisements and PPP re-negotiation**. The reactivation includes the establishment of an SCCP connection 14between the MSC 11and the BSC 12. At 127, the MSC sends a Clear command to the BSC using the SCCP connection. The Clear command includes a cause value "authentication failure". The BSC reacts by clearing the traffic channel at 128, and at 129, sending an A9- Release-A8message to the PCF 16. The A9-Release-A 8message includes the cause value "authentication failure". At 130, the PCF reacts by clearing the A8connection 17and initiating the closure of the A10connection 19. This action triggers the PDSN 18to release the PPP connection at step 131.

In particular, the Examiner refers to Madour [0006] as teaching the establishment of a traffic channel (TCH) to support an inter-PDSN handoff. However, Madour [0006] does not mention an inter-PDSN handoff but only that **when an MS attempts to use a packet-data service** steps are taken to allocate a radio traffic channel.

The Examiner refers to Madour [0017] as teaching the determination by an AN that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed. However, Madour [0017] merely describes an MS powering down during a packet-data session and determining in the MSC that the packet-data session is dormant. The appellant fails to see any teaching or suggestion that Madour [0017] should be applied in an inter-PDSN handoff context. Further, it is unclear to the applicant how the MS powering down or the determination in the MSC that the packet-data session is dormant teaches or suggests that signaling **between** an **MS** and a target **PDSN** related to an **inter-PDSN handoff** has completed.

The Examiner refers to Madour [0040] as teaching the release of the TCH established to support the inter-PDSN handoff in response to the determination that the signaling between the MS and the target PDSN has been completed. However, Madour [0040] is describing steps illustrated in FIG. 3, and FIG. 3 is a flow chart illustrating the steps of the method illustrated in the signaling diagram of FIG. 2. See Madour [0038]. Moreover, FIG. 2 is a signaling diagram illustrating the flow of messages between nodes in the wireless access network of FIG. 1 when the MS powers down during a dormant packet-data session in a first embodiment of the method of the Madour invention. See Madour [0036]. The appellant fails to see any teaching or suggestion that Madour [0040] should be applied in an inter-PDSN handoff context, nor does the appellant see any teaching or suggestion that the release of a TCH established to support an inter-PDSN handoff is in response to the determination that the signaling between the MS and the target PDSN has been completed. The appellant notes that the signaling is the signaling between the MS and the target PDSN related to the inter-PDSN handoff.

Thus, the appellant submits that Madour, as cited by the Examiner, does not teach determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed. Moreover, the applicant submits that Madour, as cited by the Examiner, does not teach that the AN releases the **same** TCH established to support the inter-PDSN handoff in response to making this determination.

In the *Response to Arguments* section of the FOA, the Examiner refers to FIG. 6 of Madour and the paragraphs describing FIG. 6. However, as quoted above in [0054], FIG. 6 illustrates the situation in which an inter-BSC/inter-PCF/intra-PDSN dormant handoff is performed from a Source BSC 76 to a Target BSC 77, and from a Source PCF 78 to a Target PCF 79. In contrast claim 1, recites an inter-PDSN handoff involving a target PDSN. Madour

FIG. 6 includes PDSN 18 but does not include a target PDSN of an inter-PDSN handoff.

Since Madour does not teach all of the limitations of independent claim 1, or therefore, all the limitations of dependent claims 2-6, it is asserted that neither anticipation nor a prima facie case for obviousness has been shown by the Examiner. The Appellant submits that claims 1-6 are fully patentable over the cited reference and request that the Examiner be REVERSED.

Group 2 – Claims 20, 22 and 24

Claim 20 provides (underlined language being relevant to the argument presented below):

20. (previously presented) An Access Network (AN) for facilitating an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the AN comprising:

a packet control function (PCF)

adapted to exchange, with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS);

a base station (BS), communicatively coupled to the PCF,

adapted to establish, with the MS, a traffic channel (TCH) to support the inter-PDSN handoff,

adapted to determine that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, and

adapted to release the TCH, in response to the determination that the signaling between the MS and the target PDSN has been completed.

In the Final Office Action mailed January 12, 2007 (hereinafter "FOA"), the Examiner refers to Madour [0006, 0017, 0040, 0054, and 0064] as teaching the language of claim 20. Madour [0006, 0017, 0040, 0054, and 0064] are quoted above in the argument presented for claim 1, with emphasis added.

In particular, the Examiner refers to Madour [0006] as teaching the establishment of a traffic channel (TCH) to support an inter-PDSN handoff. However, Madour [0006] does not mention an inter-PDSN handoff but only that **when an MS attempts to use a packet-data service** steps are taken to allocate a radio traffic channel.

The Examiner refers to Madour [0017] as teaching the determination that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed. However, Madour [0017] merely describes an MS powering down during a packet-data session

and determining in the MSC that the packet-data session is dormant. The appellant fails to see any teaching or suggestion that Madour [0017] should be applied in an inter-PDSN handoff context. Further, it is unclear to the applicant how the MS powering down or the determination in the MSC that the packet-data session is dormant teaches or suggests that signaling **between** an **MS** and a target **PDSN** related to an **inter-PDSN handoff** has completed.

The Examiner refers to Madour [0040] as teaching the release of the TCH established to support the inter-PDSN handoff in response to the determination that the signaling between the MS and the target PDSN has been completed. However, Madour [0040] is describing steps illustrated in FIG. 3, and FIG. 3 is a flow chart illustrating the steps of the method illustrated in the signaling diagram of FIG. 2. See Madour [0038]. Moreover, FIG. 2 is a signaling diagram illustrating the flow of messages between nodes in the wireless access network of FIG. 1 when the MS powers down during a dormant packet-data session in a first embodiment of the method of the Madour invention. See Madour [0036]. The appellant fails to see any teaching or suggestion that Madour [0040] should be applied in an inter-PDSN handoff context, nor does the appellant see any teaching or suggestion that the release of a TCH established to support an inter-PDSN handoff is in response to the determination that the signaling between the MS and the target PDSN has been completed. The appellant notes that the signaling is the signaling between the MS and the target PDSN related to the inter-PDSN handoff.

Thus, the appellant submits that Madour, as cited by the Examiner, does not teach determining that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed. Moreover, the applicant submits that Madour, as cited by the Examiner, does not teach that the BS releases the **same** TCH established to support the inter-PDSN handoff in response to making this determination.

In the *Response to Arguments* section of the FOA, the Examiner refers to FIG. 6 of Madour and the paragraphs describing FIG. 6. However, as quoted above in [0054], FIG. 6 illustrates the situation in which an inter-BSC/inter-PCF/intra-PDSN dormant handoff is performed from a Source BSC 76 to a Target BSC 77, and from a Source PCF 78 to a Target PCF 79. In contrast claim 20, recites an inter-PDSN handoff involving a target PDSN. Madour FIG. 6 includes PDSN 18 but does not include a target PDSN of an inter-PDSN handoff.

Since Madour does not teach all of the limitations of independent claim 20, or therefore, all the limitations of dependent claims 22 and 24, it is asserted that neither anticipation nor a

prima facie case for obviousness has been shown by the Examiner. The Appellant submits that claims 20, 22 and 24 are fully patentable over the cited reference and request that the Examiner be REVERSED.

Rejections under 35 U.S.C. §103

Group 3 – Claims 7-12

Claims 7-12 are ultimately dependent upon claim 1, which has been shown to be allowable above over Madour. The appellant therefore respectfully submits that claims 7-12 may be allowed on that basis. The appellant also notes for the record that these claims further introduce additional limitations that, particularly when considered in context with the claims from which each depends, constitute incremental patentable subject matter.

In particular, claim 7 recites (emphasis added) "wherein determining that the signaling between the MS and the target PDSN has been completed comprises receiving, **by the AN from the target PDSN**, **a request to transition** the packet data session from an active state **to a dormant state**." The Examiner refers to Madour '431 [0035] as teaching the language of claim 7. Madour '431 [0035] reads (emphasis added):

> [0035] Since the terminal 205 has to move to the target BS 222 the terminal 205 needs to initiate a connection with the target BS 222. For doing so, the terminal 205 uses the GHDM/UHDM message 320 for sending to the target BS 222 a Handoff Completion message 332. The **target BS** 222 further replies to the Handoff Completion message 332 by **sending a BS Ack Order** 336. **After receiving the BS Ack Order 336, the terminal 205 may go dormant** (dormant packet data session). Upon reception of the Handoff Completion message from the terminal 205, the target BS 222 initiates a signaling 340 that involves the MSC 235, and the PDSN 220. During the signaling 340, the **target BS** 222 uses the PANID information and **for establishing an A10/A11 connection with the PDSN** 220. The **PDSN** 220 further **disconnects any previous A10/A11 connection**. In the present case, the PDSN 220 was connected to the source BS 208.

Thus, the appellant submits that Madour '431, as cited by the Examiner, does not teach receiving, **by the AN from the target PDSN**, **a request to transition** the packet data session from an active state **to a dormant state**. Instead, the appellant submits that Madour '431, as cited by the Examiner, describes a **terminal** receiving a BS **Ack** Order from a **BS**, after which the terminal may go dormant. In other words, a request being received by an AN from a PDSN to transition to a dormant state is not being described in Madour '431 [0035].

Since neither Madour nor Madour '431, either independently or in combination, teaches all of the limitations of claim 7, or therefore, all the limitations of dependent claims 8-12, it is asserted that neither anticipation nor a prima facie case for obviousness has been shown by the Examiner. The appellant submits that claims 7-12 are fully patentable over the cited reference and request that the Examiner be REVERSED.

Group 4 – Claim 21

Claim 21 is ultimately dependent upon claim 20, which has been shown to be allowable above over Madour. The appellant therefore respectfully submits that claim 21 may be allowed on that basis. The appellant also notes for the record that this claim further introduces additional limitations that, particularly when considered in context with the claim from which it depends, constitute incremental patentable subject matter.

Claim 21 recites (emphasis added) "wherein the BS, as adapted to determine that the signaling between the MS and the target PDSN has been completed, is adapted to receive, **from the target PDSN via the PCF**, an indication that the signaling between the MS and the target PDSN **related to the inter-PDSN handoff** has been completed." The Examiner refers to Jean [0030, 0034] as teaching the language of claim 21. Jean [0030, 0034] reads (emphasis added):

> [0030] Further, preferably the provision of the dormant function comprises: analyzing at the base station controller the dormant support information within the certain message received from the mobile station; if it is determined that the mobile station supports the dormant function, driving at the base station controller a dormant timer; requesting at the base station controller for interface registration in order to transmit signaling information to the PDSN, receiving a response thereto and then notifying the mobile switching center of completion of the resource assignment; establishing the PPP connection between the mobile station and the PDSN and conducting the mobile IP registration procedure, thereby transmitting and receiving packet data in the active/connected state; and **determining at the base station controller whether the dormant timer is in operation and if there has been no packet data transmission within the specified time of the dormant timer, making transition to the dormant state from the active/connected state**.
>
> ...
>
> [0034] Further, preferably the provision of the dormant function comprises: analyzing at the base station controller the dormant support information included in the service connect complete message received from the mobile station; if it is determined that the mobile station supports the dormant function, driving the dormant timer at the base station controller; sending at the base station controller an interface registration request to

the PDSN for transmission of signaling information and then receiving a response thereto and notifying the mobile switching center of the resource assignment completion; establishing the PPP connection between the mobile station and the PDSN and conducting the mobile IP registration procedure, thus transmitting and receiving packet data in the active/connected state; and **determining at the base station controller whether the dormant timer is in operation and if no packet data has been transmitted within the specified value of the dormant timer, making a transition from the active/connected state to the dormant state**.

Thus, the appellant submits that Jean, as cited by the Examiner, does not teach a BS adapted to receive, **from the target PDSN via the PCF**, an indication that the signaling between the MS and the target PDSN **related to the inter-PDSN handoff** has been completed. Instead, the appellant submits that Jean, as cited by the Examiner, describes a base station controller monitoring packet data transmissions and using a **dormant timer** to determine when a transition to a dormant state should be made. In other words, an indication being received by a BS from a PDSN regarding signaling related to an inter-PDSN handoff is not being described in Jean.

Since neither Madour nor Jean, either independently or in combination, teaches all of the limitations of claim 21, it is asserted that neither anticipation nor a prima facie case for obviousness has been shown by the Examiner. The appellant submits that claim 21 is fully patentable over the cited reference and request that the Examiner be REVERSED.

(8) Conclusion

For the above reasons, the appellants respectfully submit that the rejection of claims 1-12, 20-22 and 24 is in error and should be reversed and the claims allowed.

Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. **502117 -- Motorola, Inc**.

Respectfully submitted,
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(9) Claims Appendix

1. (previously presented) A method for an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff comprising:

exchanging, by an Access Network (AN) with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS);

establishing, by the AN with the MS, a traffic channel (TCH) to support the inter-PDSN handoff;

determining, by the AN, that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed;

in response to the determination that the signaling between the MS and the target PDSN has been completed, releasing, by the AN, the TCH.

2. (previously presented) The method of claim 1, wherein the signaling to support the inter-PDSN handoff comprises signaling from the group consisting of an A11-Registration Request and an A11-Registration Reply.

3. (previously presented) The method of claim 1, wherein the signaling related to the inter-PDSN handoff comprises signaling from one or more of the group of signaling types consisting of point-to-point (PPP) connection establishment signaling and mobile internet protocol (MIP) signaling.

4. (previously presented) The method of claim 1, wherein releasing the TCH is performed in response to determining, by the AN, that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, that the MS has indicated that it does not have data to send after the dormant mode handoff, and that the AN has not received packet data from the MS after completing the signaling related to the inter-PDSN handoff.

5. (previously presented) The method of claim 1, further comprising:

receiving, by the AN from the MS, an origination message indicating that the MS is requesting a dormant mode handoff and does not have data ready to send;

sending, by the AN to the target PDSN, an indication that a handoff is being performed and the MS does not have data ready to send.

6. (previously presented) The method of claim 1, further comprising:

in response to the determination that the signaling between the MS and the target PDSN has been completed, releasing, by the AN, a Signaling Connection Control Part (SCCP) connection between the AN and a mobile switching center (MSC).

7. (previously presented) The method of claim 1, wherein determining that the signaling between the MS and the target PDSN has been completed comprises

receiving, by the AN from the target PDSN, an indication that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed.

8. (previously presented) The method of claim 7, wherein determining that the signaling between the MS and the target PDSN has been completed comprises

receiving, by the AN from the target PDSN, a request to transition the packet data session from an active state to a dormant state.

9. (previously presented) The method of claim 7, wherein the indication that the signaling related to the inter-PDSN handoff has been completed is included within an A11-Session Update message.

10. (previously presented) The method of claim 9, wherein the indication that the signaling related to the inter-PDSN handoff has been completed is conveyed via a Normal Vendor/Organization Specific Extension (NVSE) of the A11-Session Update message.

11. (previously presented) The method of claim 7, further comprising sending, by the target PDSN to the AN, the indication that the signaling related to the inter-PDSN handoff has been completed, in response to determining, by the target PDSN, that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed and that the target PDSN has not received packet data from the MS or for the MS in addition to the signaling related to the inter-PDSN handoff.

12. (previously presented) The method of claim 11, wherein sending the indication that the signaling related to the inter-PDSN handoff has been completed is performed in response to determining additionally, by the target PDSN, that the AN has indicated that the MS does not have data ready to send.

13. (original) The method of claim 1, further comprising receiving, by the AN from the target PDSN, a timer value for a packet data inactivity timer.

14. (original) The method of claim 13, wherein the timer value is received via a message from the group consisting of an A11-Session Update message and an A11-Registration Reply message.

15. (previously presented) The method of claim 13, wherein determining that the signaling between the MS and the target PDSN has been completed comprises

determining, by the AN, that the packet data inactivity timer has expired and that the MS and the target PDSN are no longer exchanging packet data.

16. (previously presented) The method of claim 13, further comprising sending, by the target PDSN to the AN, the timer value for a packet data inactivity timer, in response to determining, by the target PDSN, that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed and that the target PDSN has not received packet data from the MS or for the MS in addition to the signaling related to the inter-PDSN handoff.

17. (original) The method of claim 13, wherein sending the timer value is performed in response to determining additionally, by the target PDSN, that the AN has indicated that the MS does not have data ready to send.

18. (original) The method of claim 1, further comprising starting, by the AN, an MS-PDSN handoff signaling timer, in response to detecting an inter-PDSN handoff for the MS.

19. (previously presented) The method of claim 18, wherein determining that the signaling between the MS and the target PDSN has been completed comprises

determining, by the AN, that the MS-PDSN handoff signaling timer has expired and that the MS and the target PDSN are no longer exchanging packet data.

20. (previously presented) An Access Network (AN) for facilitating an improved inter-PDSN (Packet Data Serving Node) dormant mode handoff, the AN comprising:

a packet control function (PCF)

adapted to exchange, with a target PDSN, signaling to support an inter-PDSN handoff of a packet data session of a mobile station (MS);

a base station (BS), communicatively coupled to the PCF,

adapted to establish, with the MS, a traffic channel (TCH) to support the inter-PDSN handoff,

adapted to determine that signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed, and

adapted to release the TCH, in response to the determination that the signaling between the MS and the target PDSN has been completed.

21. (previously presented) The AN of claim 20, wherein the BS, as adapted to determine that the signaling between the MS and the target PDSN has been completed, is adapted to

receive, from the target PDSN via the PCF, an indication that the signaling between the MS and the target PDSN related to the inter-PDSN handoff has been completed.

22. (previously presented) The AN of claim 20, wherein the BS is further adapted to receive, from the target PDSN via the PCF, a timer value for a packet data inactivity timer in response to the signaling to support the inter-PDSN handoff exchanged by the PCF with the target PDSN.

23. (previously presented) The AN of claim 22, wherein the BS, as adapted to determine that the signaling between the MS and the target PDSN has been completed, is adapted to

determine that the packet data inactivity timer has expired.

24. (previously presented)The AN of claim 20, wherein the BS is further adapted to start an MS-PDSN handoff signaling timer, in response to detecting the inter-PDSN handoff for the MS.

25. (previously presented) The AN of claim 24, wherein the BS, as adapted to determine that the signaling between the MS and the target PDSN has been completed, is adapted to

determine that the MS-PDSN handoff signaling timer has expired and that the MS and the target PDSN are no longer exchanging packet data.

(10) Evidence Appendix

Not applicable.

(11) Related Proceeding Appendix

Not applicable.